M2004-01



TN DEPT. OF ENVIRONMENT & CONSERVATION DIVISION OF WATER POLLUTION CONTROL MINING SECTION 2700 MIDDLEBROOK PIKE SUITE 220 KNOXVILLE TN 37921

ISSUE DATE 3/12/2004 EXPIRATION DATE 04/12/2004

TO WHOM IT MAY CONCERN: The applications described herein have been submitted for Aquatic Resource Alteration Permits pursuant to *The Tennessee Water Quality Control Act of 1977*, T.C.A. §69-3-108.

The purpose of this notice is to advise all concerned of the proposals for which permits are sought and to solicit comments and information necessary to evaluate the probable impact of the activities upon the respective water resources. The decision whether to issue or deny will in part be based upon that evaluation. All factors that may be relevant to the proposals will be considered.

Persons wishing to comment on or object to the issuance of a proposed permit are invited to submit comments in writing to the address listed above. Written statements received in this office on or before the date of expiration of the comment period, **April 12, 2004**, will become part of the record and will be considered in the determination. The public notice number, applicant's name, permit number and coordinator should be referenced.

Interested persons may also request in writing that the director of the Division hold a public hearing on any application. The request must be filed within the comment period and must indicate the interest of the person requesting it, and the reasons that the hearing is warranted. When there is sufficient public interest, the director shall hold a hearing in accordance with Rule 1200-4-1-.05(3)(G).

After consideration of comments submitted during the public comment period, the hearing record if any, and the requirements of federal and state law, the director of the Division will make determinations regarding the final action on each permit. Permit applications, supporting documentation and related comments are available for review and/or copying.

The public notice includes tentative determinations regarding the issuance, modification, denial or termination of permits for the activities proposed herein.

Public Notice M2004-01 March 12, 2004

Permit Application Number: ARAP-#M2004-01

Applicant: Mr. Danny Chambers, President

Mountainside Coal Company 7692 South Highway 25W Williamsburg, KY 40769

Location: Unnamed tributaries to Rock Creek locally known as Harris Branch in Claiborne County near Clairfield, Tennessee at 36°31'28" latitude and 83°55'54" longitude on the Eagan, Tennessee USGS Quadrangle. The effected reaches are associated with Mountainside Coal Company, Harris Branch Surface Mine, OSM Permit #3131.

Background Information: Mountainside Coal Company is proposing to develop the Harris Branch Surface Mine, OSM Permit #3131 in the Rock Creek watershed. Elimination of existing highwall and restoration of degraded stream reaches are to result from mining the Coal Creek(Jellico) and Blue Gem(Rich Mountain) coal seams. The mining related activities proposed in the Mountainside Coal Company permit application would result in the alteration of intermittent and perennial stream reaches and associated wetlands in Harris Branch and its tributaries.

A review of State of Tennessee databases indicated that the Blackside Dace a species federally listed as threatened is recorded to occur in Straight Creek downstream of the proposed mining related activities. The Division's review of the permit applications determined that the scope of the project was such that the proposed activities were not covered under a general permit.

During June 25, 2003 and July 3, 2003 pre-mine investigations Mining Section personnel identified intermittent and perennial stream reaches and wetlands. The intermittent and perennial stream reaches have been encroached on and altered by activities associated with coal mining prior to the implementation of the *Surface Mining and Reclamation Control Act of 1977*, logging, oil and gas well development. Harris Branch is impounded by beaver activity into the orphan mine area creating an approximately 3.5 acre wetland. In an adjacent orphan mine pit is another 0.1-acre wetland associated with Harris Branch.

On October 28, 2003, the Division of Water Pollution Control-Mining Section conducted a macroinvertebrate stream survey in Harris Branch. This survey documented that the stream fully supported the use classification for fish and aquatic life in comparison to biological index scores for Ecoregion 69D the Cumberland Mountains. The macroinvertebrate stream survey also documented that the habitat in Harris Branch is moderately impaired in comparison to habitat assessment guidelines for Ecoregion 69D. Fish surveys conducted by Mountainside Coal Company documented only three species (creek chubs, green sunfish, and channel catfish) in Harris Branch.

Project Description ARAP-#M2004-01: Mountainside Coal Company has applied for an Individual Aquatic Resource Alteration permit for the alteration and restoration of approximately 2240 linear feet of Harris Branch and 1040 linear feet of intermittent tributaries to Harris Branch. Temporary diversion channels are to be constructed that will direct flow away from active mining. The diversion channels route clean water away from active mining preventing commingling with untreated mine wastewater. The diverted water will be redirected post mining to the stream channels enhanced or reconstructed contemporaneously with the mine area reclamation.

- The permit application indicates approximately 3280 linear feet of intermittent stream and 3.6 acres of associated wetlands are to be altered by mining related activities by the Harris Branch Surface Mine, OSM Permit # 3131. These stream reaches have been impacted by mining related activities prior to the implementation of the Surface Mining and Reclamation Control Act of 1977.
- The proposed activity is to include the restoration and enhancement of approximately 3280 linear feet of intermittent stream channel post-mining. The stream reaches will be reconstructed on the reclaimed contours to emulate the drainage patterns prior to coal mining in the watershed based on the USGS quadrangle. Reconstruction and enhancements to stream reaches will follow a generalized template. Variations from the generalized template may occur due to specific site conditions and material availability. The reconstructed stream channels are designed to have the following characteristics:
 - a. A defined channel is to be reconstructed that will vary from a four feet width at the higher elevation transition to undisturbed stream reach to a twelve feet width at the lower elevation transition to undisturbed stream reach. Approximately thirty feet on either side of the reconstructed channel is designed to function as flood prone area.
 - b. Bankfull depth and width of the reconstructed stream channel is determined by pre-mining stream conditions upstream and downstream of the disturbance.
 - c. The channels slope will vary in gradient 3 percent to 8.4 percent.
 - d. Channels are to be lined with subsoil, geotextile fabric, subsoil, small rock, and larger rock. These materials will be placed to reconstruct step pools at slope changes to reduce velocities, provide bank stabilization, and aquatic habitat.

Approximately 3280 feet of stream will be restored at a mitigation ratio of 1.5:1 for 2187 feet of stream alteration. An additional 8200 feet of wet weather conveyance is to be stabilized and enhanced post-mining at a mitigation ratio of 6:1 for 1367 feet of stream alteration

• On completion of channel construction and achievement of final grade the area will be revegetated with an appropriate seed mix. The area will also be planted with endemic tree and shrub species.

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• The approximately 3.6 acres of wetland in orphan mine areas proposed for alteration will be mitigated by converting eleven sediment basins into 6.57 acres of wetland habitat post-mining at a mitigation ratio of 1.8:1.

Tentative Determination: The Division proposes to issue a conditional permit.

Permit Coordinator: Dave Turner

Mining Section

Division of Water Pollution Control

2700 Middlebrook Pike

Suite 220

Knoxville, TN 37921

Aquatic Resource Alteration Permit Conditions

- 1. The work shall be accomplished in conformance with the approved plans, specifications, data and other information submitted in support of the above application and the limitations, requirements and conditions set forth herein.
- 2. The proposed work shall be carried out in such a manner as will prevent violations of water quality criteria as stated in Rule 1200-4-3-.03 of the Rules of the Tennessee Department of Environment and Conservation. This includes but is not limited to the prevention of any discharge that causes a condition in which visible solids, bottom deposits or turbidity impairs the usefulness of waters of the state for any of the uses designated by Rule 1200-4-4. These uses include fish and aquatic life, livestock watering and wildlife, recreation and irrigation.
- 3. Activities that result in the alteration to "waters of the state" other than the reaches specified in the approved plans and permit require prior authorization under a separate aquatic resource alteration permit.
- 4. A copy of the permit and approved plans must be kept on site during all construction phases of the activity covered.
- 5. Drainage and erosion controls must be in place prior to commencing construction activities.
- 6. Areas where significant erosion is possible will be protected with structures such as cover logs, bank cribs, and boulder placement. Structures such as but not limited to log dams, K-dams, wedge dams, substrate additions will be utilized for energy dissipation, to vary flow depth regimes, and provide aquatic habitat. Energy dissipation structures must be placed at changes of grade.

- 7. Reconstructed stream reaches and discharge channels to the ARAP areas must be lined with appropriate erosion control matting.
- 8. Mountainside Coal Company must notify the Division in writing prior to beginning the cut sequence through a stream reach designated as part of the aquatic resource alteration permit and on completion of the cut sequence.
- 9. To the extent practicable enhancements must be in place prior to the start of each cut sequence. Specifically outslopes must stabilized so that the stream channels are not further eroded. Reconstruction of the stream channel is to commence on the completion of each cut sequence.
- 10. Mountainside Coal Company must provide an as-built plan of each reconstructed and enhanced stream reach to the Division on completion of construction activities.
- 11. Fifty-foot riparian buffers on either side of the stream channel must be established. Buffer areas without established vegetation must be planted with endemic shrub and tree species at the rate of four hundred stems per acre. No species should compromise more than one-third of the total planted trees in the riparian buffer zones. Seventy-five percent survivorship must be attained during the five-year monitoring period.
- 12. Constructed wetlands may have open water areas to encourage the growth of successional wetland species and provide habitat for aquatic life. Adjacent areas within the riparian zones must be planted or sprigged. The development of the wetlands and aquatic habitat areas should be included in the annual monitoring reports.
- 13. Constructed wetlands converted from sediment basins must have developed outlets and be hydraulically connected to the drainages within the watershed. Conveyance channels through these wetlands must be stabilized to prevent erosion through the wetlands and sedimentation downstream.
- 14. Undisturbed areas within the riparian buffer zones may not require additional planting. This is subject to Division approval and Mountainside Coal Company must demonstrate that tree and shrub species are established in these zones and that they have not been disturbed by activities related to the Harris Branch Surface Mine.
- 15. A written agreement must be obtained from the landowner that precludes surface disturbance such as harvesting of timber in the fifty-foot buffer zones for a minimum of twenty-five years with selective harvesting only in these zones thereafter. This will assist in assuring the long-term stability of the reconstructed stream reaches.

- 16. Mountainside Coal Company must conduct an annual biological evaluation of Harris Branch during active mining at latitude N36°31'30", longitude W83°56'05.9". The biological survey must follow the semi-quantitative riffle kick protocols specified in the *State of Tennessee SOP for Macroinvertebrate Stream Surveys, March 2002, Revised November 2003*. A biological evaluation must also be conducted at the conclusion of Level III monitoring.
- 17. Mountainside Coal Company must conduct a 100-particle distribution study (pebble count) semi-annually at the biological monitoring station and immediately above Rock Creek Road. Mountainside Coal Company must establish surveyed benchmarks for the "pebble count" stations. The establishment of benchmarks and "pebble count" must be conducted in accordance with the *U.S. Forest Service General Technical Report RM-245 Stream Channel Reference Sites* (Harrelson et al.). At a minimum these reaches must be visually inspected quarterly for indications of increased sedimentation. These inspections must be documented with photographs and notes. A report of quarterly inspection results must be submitted to the Division within thirty days of the inspection.
- 18. An annual report of the 100-particle distribution study must be submitted to the Division of Water Pollution Control-Mining Section. If the D₅₀ particle size of the "pebble count" decreases more than 50% of initial D₅₀ at the downstream "pebble count" station then Mountainside Coal Company must conduct a biological stream survey within thirty days and another at ninety days. Implementation of remedial measures such as increasing sediment controls will be required.
- 19. Level III monitoring requirements must be implemented for ARAP-#M2004-01. The first two of the following items have been completed and submitted to the Division in this application:
 - Narrative description and photos of pre-project conditions
 - Pre-project habitat assessment
 - Annual narrative description and photos
 - Annual riparian vegetation survey
 - Annual channel morphology survey
 - Post-project habitat assessment at the end of the required monitoring period
- 20. Reaches that develop significant erosion or bank instability should be identified during the annual monitoring and remedial stabilization measures taken such as, but not limited to, boulder/rock deflectors, log revetments, bank cribs, etc. Location and type of remedial measures taken should be indicated in the narrative description and photos submitted annually to the Division.
- 21. A comprehensive post-project report must be submitted to the Division at the conclusion of the five-year monitoring period. This report must demonstrate that the ARAP channel, aquatic habitat areas, and riparian buffer zones have met permit conditions.

22. The Division will issue a letter of finding indicating that remedial action and additional monitoring is required or that no additional action is required.

State of Tennessee Antidegradation Policy

Tennessee's Antidegradation Statement is found in Chapter 1200-4-3-.06 of the Rules of the Tennessee Department of Environment and Conservation. The primary purpose of the antidegradation policy is to establish a greater level of protection for those waters that are identified to be of high quality. Some high-quality waters are in near-pristine condition. Others are determined to be high quality due to specialized uses and/or unique features.

Generally, there are two types of high-quality waters. Outstanding National Resource Waters (ONRWs), or Tier 3 waters, are specifically designated by the Water Quality Control Board and are afforded the greatest level of protection. No new discharges or expansion of existing discharges are allowed to result in degradation of the existing water quality.

Other high-quality waters are identified by the Department as Tier 2 waters and are also protected against degradation. Some degradation may be allowed only if the Water Quality Control Board deems it economically and socially necessary. Other surface waters not specifically identified and/or designated as high quality are referred to as Tier 1 waters. Tennessee's Water Quality Standards must be achieved and/or maintained in these waters.

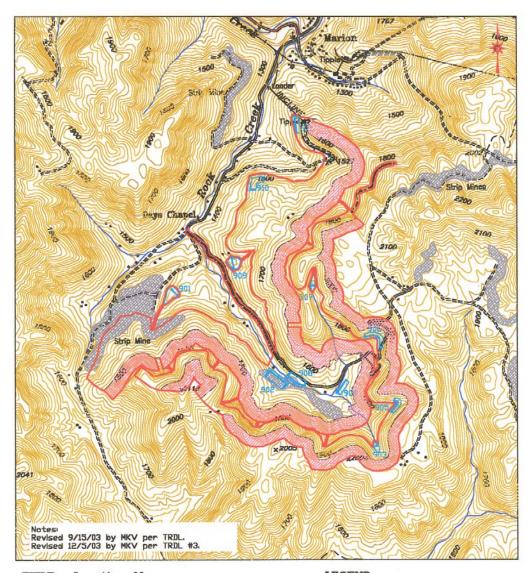
The Division has determined that these drainages are Tier 1 waters that will be restored as a condition of remining activities in the watershed.

This permit does not obviate requirements of other federal, state or local laws.

The State of Tennessee reserves the right to modify or revoke this permit or to seek modification or revocation should the State determine that the activity results in more than an insignificant violation of applicable water quality criteria or violation of the Act. Failure to comply with permit terms may result in penalty in accordance with § 69-3-115 of the Act.

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An appeal of this action may be made to the Water Quality Control Board. In order to appeal, a petition requesting a hearing before the Board must be filed within thirty days after receipt of the permit action. In such petition, each contention should be stated in numbered paragraphs, which describe how the proposed activity would be lawful and the action of the state is inappropriate. The petition must be prepared on 8½" by 11" paper, addressed to the Water Quality Control Board and filed in duplicate at the following address: Paul E. Davis, Director, Division of Water Pollution Control, 6th Floor L & C Annex, 401 Church Street, Nashville, Tennessee 37243-1534. Any hearing would be in accordance with T.C.A. §69-3-110 and 4-5-301 et. seq. Questions concerning this certification should be addressed to Dave Turner at 865-594-5541 or Dan Murray at 865-594-5549.



TITLE: Location Map
AREA: Harris Branch Surface Mine
SURFACE RIGHTS: Ataya Hardwoods, LLC
MINERAL RIGHTS: BLC Properties, LLC
ACREAGE: 368.4 Surface & 216.7 Auger

COUNTY: Claiborne

Quadrangle: Eagan, TN-KY (144-SW)

LATITUDE: 38° 31' 28" LONGITUDE: 83° 55' 54" DATE: 05/06/2003

Prepared by: Mark V Mining and Engineering, Inc. 353 North Cullom Street Clinton, Tennessee 37716 (865) 457-1664

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Harris Branch Surface Mine Site Location Map LEGEND:

Permit Area

Sediment Basin

SCALE: 1,000' 2,000' 3,000'

Prepared for: Mountainside Coal Company 7692 South Highway 25W Williamsburg, KY 40769